A New Species of the Genus *Basilobelba* (Acari, Oribatei) from Calcutta, India

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Abstract: This paper contains the description of one new species of the genus *Basilobelba* BALOGH, 1958.

Authors while collecting oribatid mites from Calcutta and suburbs came across a species belonging to the genus *Basilobelba* BALOGH, 1958. The genus has not been reported from India before and the species which is described here appears new to science. The type species is deposited in the collection of Entomology Laboratory, Calcutta University.

Basilobelba indica sp. nov.

(Figs. 1-2)

Colour brown; length of the body $420\,\mu$ - $465\,\mu$; width $240\,\mu$ - $290\,\mu$; body and the lateral margins of the prodorsum, the humeral regions of the notogaster, the proximal portions of legs covered by cerotegument, centrodorsal portion of notogaster and sensillus devoid of cerotegument, but a thin sheet of cerotegument present on the ventral region.

Rostral hairs inserted laterally on rostrum, smooth, thin and strongly bent basally; lamellar hairs inserted dorsally behind the rostrum on distinct apophyses, also smooth, much thicker at the base and gradually become thinner at the apex; interlamellar hairs short and smooth; sensillus long, flagelliform with two rows of fine barbs.

Anterior margin of notogaster rather straight, lateral margins strongly convex and posterior margin rounded; seven pairs of hairs la, lm, lp, h_1 , h_2 , h_3 , and ps_3 , arranged dorsolaterally on notogaster as in figure 1A, all the hairs except h_1 , and ps_3 , rather thick, rough and pointed at the tips, h_1 and ps_3 very short and smooth.

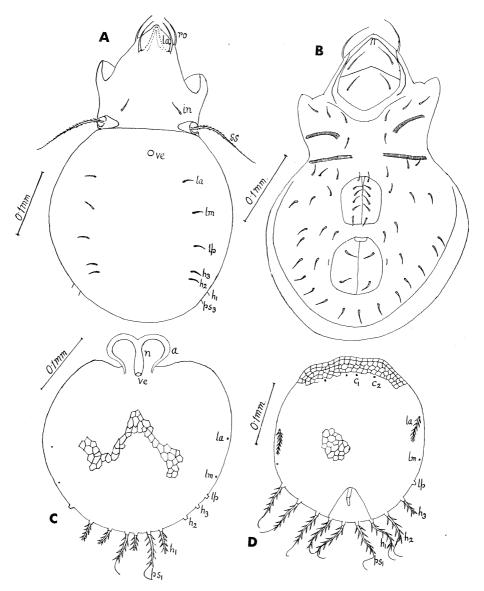


Fig. 1. Basilobelba indica sp. nov. A: dorsal view after the removal of tritonymphal and deutonymphal scalps; ro-rostal hair, la-lamellar hair, in-interlamellar hair, ss-sensillus, Ve-notogastral tubercle, la, lm, lp, h_3 , h_2 , h_1 , ps_3 -notogastral hairs. B: Ventral view. C: Tritonymphal scalp; Ve-notogastral tubercle, n-thong of buckle attachment, a-arm of buckle attachment, la, lm, lp, h_1 , h_2 , h_3 , ps_1 -hairs on tritonymphal scalp. D: Deutonpmphal scalp; c_1 , c_2 , la, lm, lp, h_3 , h_2 , h_1 , ps_1 -hairs on deutonymphal scalp.

It is difficult to ascertain which of the three pairs of hairs ps_1 , ps_2 , and ps_3 , is missing, although from the position of hairs it appears ps_1 , ps_2 , are lacking.

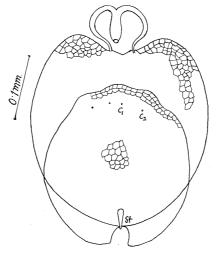


Fig. 2. Basilobelba indica sp. nov., tritonymphal and deutonymphal scalps in place; c_1 , c_2 notogastral hairs on deutonymphal scalp, st-stylet.

Hairs on ventral surface of gnathosoma long and do not overlap each other; ten pairs of hairs on the ventral plates arranged as in the figure 1B; genital plates rather trapezoid in shape with six pairs of hairs; anal plates larger than genital plates, oblong in shape with two pairs of anal hairs; hairs of legs strong, stout and brached.

Attachment of the deutonymphal and tritonymphal scalps and their afixation to the notogaster similar to other known species of the genus; the thong or 'laniere' long and the arms of buckle short; tritonymphal scalp with seven pairs of hairs, c_1 and c_2 absent, the hairs long and strongly barbed; deutonymphal sclap with nine pairs of hairs, insertions of c_1 and c_2 present on both the sides near the anterior middorsal region and lm near the lateral margin, the hairs also long, flagelliform and barbed.

Holotype: 1 adult; India: Calcutta University College of Science and Technology campus at Ballygunge (Calcutta), 8. VII. 1969, from humus, Coll. A. K. Bhaduri. Paratypes 7 adults, same data as holotype and 4 adults, Behala (Calcutta), 4. IX. 1971, from compost heaps by the side of a pond, Coll. A. K. Bhaduri.

Distribution: Calcutta (India)

Remark: The new species can easily be differentiated from *Basilobelba africana* WALLWORK, 1961 and *Basilobelba retiarius* (WARB., 1912) by the presence of smooth lamellar and interlamellar hairs, by the number and disposition of notogastral hairs and arrangement of hairs on ventral plate. The Indian species also differs from *Basilobelba pacifica* HAMMER, 1971 in the absence of transverse ridge anteriorly on propodosoma, the transverse bridge between the pseudostigmata, in the arrangement of hairs on ventral plate, in the presence of rather trapezoid genital plate, in the form and structure of the buckle and in the absence of leaf-shaped hairs on the legs.

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References

- BALOGH, J., 1958. Oribatides nouvelles de l'Afrique tropicale. Rev. Zool. Bot. Afr., 58: 1-34.
- HAMMER, M., 1971. On some Oribatids from Viti Levu, The Figi Islands. *Biol. Skr. Dan. Vid. Selsk.*, 16: 1-60.
- WALLWORK, J. A., 1961. Some Oribatei from Ghana. IV. The genus *Basilobelba* BALOGH. *Acarologia*, 3: 130-135.
- *Warburton, C., 1912. The Acarina of the seychelles. Trans. Linn. Soc. London, second Series, Zoology, 15: 349-360.
 - * Not personally seen.